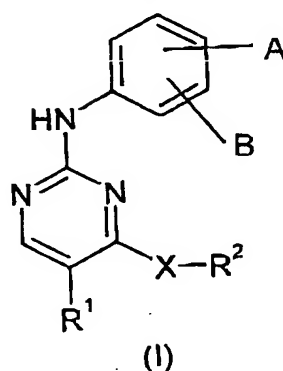


# Claims:

## 1. Compounds of general formula (I)



- in which
- A or B in each case independently of one another represent cyano, halogen, hydrogen, hydroxy, aryl or the group  $-\text{NO}_2$ ,  $-\text{NH}_2$ ,  $-\text{NR}^3\text{R}^4$ ,  $-\text{C}_{1-6}\text{-alkyl}-\text{NR}^3\text{R}^4$ ,  $-\text{N}(\text{C}_{1-6}\text{-hydroxyalkyl})_2$ ,  $-\text{NH}-\text{C}(\text{NH})-\text{CH}_3$ ,  $-\text{NH}(\text{CO})-\text{R}^5$ ,  $-\text{NHCOOR}^6$ ,  $-\text{NR}^7-(\text{CO})-\text{NR}^8\text{R}^9$ ,  $-\text{NR}^7-(\text{CS})-\text{NR}^8\text{R}^9$ ,  $-\text{COOR}^5$ ,  $-\text{CO}-\text{NR}^8\text{R}^9$ ,  $-\text{CONH}-\text{C}_{1-6}\text{-alkyl}-\text{COOH}$ ,  $-\text{SO}_2-\text{CH}_3$ , 4-bromo-1-methyl-1*H*-pyrazolo-3-yl
- or represent  $\text{C}_{1-6}\text{-alkyl}$  optionally substituted in one or more places, the same way or differently with halogen, hydroxy, cyano or with the group  $-\text{COOR}^5$ ,  $-\text{CONR}^8\text{R}^9$ ,  $-\text{NH}_2$ ,  $-\text{NH}-\text{SO}_2-\text{CH}_3$ ,  $-\text{NR}^8\text{R}^9$ ,  $-\text{NH}-(\text{CO})-\text{R}^5$ ,  $-\text{NR}^7-(\text{CO})-\text{NR}^8\text{R}^9$ ,  $-\text{SO}_2-\text{NHR}^3$ ,  $-\text{O}-(\text{CO})-\text{R}^5$  or  $-\text{O}-(\text{CO})-\text{C}_{1-6}\text{-alkyl}-\text{R}^5$ ,
- X represents an oxygen atom or the group  $-\text{NH}-$  or  $-\text{NR}^3\text{R}^4$ ,
- $\text{R}^1$  represents hydrogen, halogen, hydroxymethyl,  $\text{C}_{1-6}\text{-alkyl}$ , cyano or the group  $-\text{COOH}$ ,  $-\text{COO-iso-propyl}$ ,  $-\text{NO}_2$ ,  $-\text{NH}-(\text{CO})-(\text{CH}_2)_2-\text{COOH}$  or  $-\text{NH}-(\text{CO})-(\text{CH}_2)_2-\text{COO}-\text{C}_{1-6}\text{-alkyl}$ , whereby the  $\text{C}_{1-6}\text{-alkyl}$  can optionally be substituted in one or more places, in the same way or differently with halogen,
- $\text{R}^2$  represents hydrogen or the group  $-\text{NH}-(\text{CO})\text{-aryl}$  or  $\text{C}_{1-6}\text{-alkyl}$  optionally substituted in one or more places, the same way or differently with cyano, hydroxy, aryl, heteroaryl,  $\text{C}_{3-6}\text{-heterocycloalkyl}$ ring, which can optionally be interrupted with one or more nitrogen atoms, or substituted with the group  $-\text{NR}^8\text{R}^9$ , -



one or more places, the same or differently with halogen, hydroxy, C<sub>1-6</sub>-alkyl, -NH<sub>2</sub>, -NH-(CO)-CH<sub>2</sub>-NH<sub>2</sub>, -NO<sub>2</sub>, -(CO)-C(CH<sub>2</sub>)-C<sub>2</sub>H<sub>5</sub>, -COOR<sup>6</sup>, -COOC(CH<sub>3</sub>)<sub>3</sub>, or represents C<sub>3</sub>-alkynyl,

5 R<sup>3</sup> or R<sup>4</sup> in each case independently of one another represent hydrogen or C<sub>1-6</sub>-alkyl optionally substituted in one or more places, the same way or differently with hydroxy, phenyl or hydroxyphenyl, or

10 R<sup>3</sup> and R<sup>4</sup> together form a C<sub>3-6</sub>-heterocycloalkylring containing at least one nitrogen atom and optionally can be interrupted by one or more oxygen and/or sulfur atoms and/or can be interrupted by one or more -(CO)- groups in the ring and/or optionally can contain one or more possible double bonds in the ring, whereby the C<sub>3-6</sub>-heterocycloalkylring can optionally be substituted with C<sub>1-6</sub>-alkyl, C<sub>1-6</sub>-alkyl-COOH or C<sub>1-6</sub>-alkyl-NH<sub>2</sub>,

15 R<sup>5</sup> represents hydrogen, C<sub>1-6</sub>-alkyl, C<sub>1-6</sub>-alkoxy, C<sub>2-6</sub>-alkenyl, C<sub>3-6</sub>-cycloalkylring, aryl, heteroaryl, the group -(CO)-NH<sub>2</sub> or C<sub>3-6</sub>-heterocycloalkylring that can optionally be interrupted with one or more nitrogen and/or oxygen and/or sulfur atoms and/or can be interrupted by one or more -(CO)- groups in the ring and/or optionally can contain one or more possible double bonds in the ring

20 and C<sub>1-6</sub>-alkyl, C<sub>2-6</sub>-alkenyl, C<sub>3-6</sub>-cycloalkylring, C<sub>3-6</sub>-heterocycloalkylring defined above, aryl or heteroaryl can optionally be substituted in one or more places, the same way or differently with halogen, hydroxy, C<sub>1-6</sub>-alkyl, C<sub>1-6</sub>-alkoxy, C<sub>3-6</sub>-cycloalkyl, C<sub>3-6</sub>-heterocycloalkylring defined above, aryl, heteroaryl or with the group -NR<sup>8</sup>R<sup>9</sup>, -NO<sub>2</sub>, -NR<sup>7</sup>-(CO)-R<sup>5</sup>, -NH(CO)-C<sub>1-6</sub>-alkyl-NH-(CO)-C<sub>1-6</sub>-alkyl, -NR<sup>7</sup>-(CO)-NR<sup>8</sup>R<sup>9</sup>, -CO-CH<sub>3</sub>, -COOH, -CO-NR<sup>8</sup>R<sup>9</sup>, -SO<sub>2</sub>-aryl, -SH, -S-C<sub>1-6</sub>-alkyl, -SO<sub>2</sub>-NR<sup>8</sup>R<sup>9</sup>,  
25 30 whereby aryl itself can optionally be substituted in one or more places, the same way or differently with halogen, hydroxy, C<sub>1-6</sub>-alkyl or C<sub>1-6</sub>-alkoxy,

$R^6$  represents  $C_{1-6}$ -alkyl,  $C_{2-6}$ -alkenyl or phenyl,  
whereby  $C_{1-6}$ -alkyl may optionally be substituted with  $C_{3-6}$ -  
heterocycloalkylring that can optionally be interrupted with one or  
more nitrogen and/or oxygen and/or sulfur atoms and/or can be  
interrupted by one or more  $-(CO)-$  groups in the ring and/or  
optionally can contain one or more possible double bonds in the  
ring,

$R^7$  represents hydrogen or  $C_{1-6}$ -alkyl,

$R^8$  or  $R^9$  in each case independently of one another represent hydrogen,  
 $C_{1-6}$ -alkyl,  $C_{2-6}$ -alkenyl,  $C_{3-6}$ -cycloalkyl, aryl or heteroaryl or the  
group  $R^{10}$ ,

whereby  $C_{1-6}$ -alkyl,  $C_{2-6}$ -alkenyl,  $C_{3-6}$ -cycloalkyl, aryl or heteroaryl  
can optionally be substituted in one or more places, the same way  
or differently with halogen, heteroaryl, hydroxy,  $C_{1-6}$ -alkoxy,  
hydroxy- $C_{1-6}$ -alkoxy or the group  $-COOH$ ,  $-NO_2$ ,  $-NR^8R^9$ ,  $-N(C_{1-6}$ -  
alkyl) $_2$  or with a  $C_{3-6}$ -heterocycloalkylring can optionally be  
interrupted with one or more nitrogen and/or oxygen and/or sulfur  
atoms and/or can be interrupted by one or more  $-(CO)-$  groups in  
the ring and/or optionally can contain one or more possible double  
bonds in the ring,

or

$R^8$  and  $R^9$  together form a  $C_{3-6}$ -heterocycloalkylring containing at least one  
nitrogen atom and optionally can be interrupted by one or more  
oxygen and/or sulfur atoms and/or can be interrupted by one or  
more  $-(CO)-$  groups in the ring and/or optionally can contain one  
or more possible double bonds in the ring, whereby the  $C_{3-6}$ -  
heterocycloalkylring can optionally be substituted in one or more  
places, the same way or differently with hydroxy or the group  $-$   
 $NR^8R^9$ ,  $-NH(CO)-R^5$ , hydroxy- $C_{1-6}$ -alkyl or  $-COOH$  and

$R^{10}$  represents  $-SO_2$ -aryl,  $-SO_2$ -heteroaryl or  $-SO_2-NH_2$  or  $-SO_2-C_{1-6}$ -  
alkyl,

whereby the aryl can be substituted with  $-C_{1-6}$ -alkyl,

with the following provisos:

whereby when X represents  $-NR^3R^4$  then  $R^2$  does not represent a substituent,

whereby when A and B represent hydrogen, X represents  $-NH-$  and  $R^2$  represents  $C_{1-6}$ -alkyl,

5 then  $R^1$  represents  $-NH-(CO)-CH(NH_2)-(CH_2)_2-COOH$  or  $-NH-(CO)-CH(NH_2)-(CH_2)_2-COOC_2H_5$ ,

whereby when A represents  $-(CO)-OC_2H_5$  or hydroxy, B represents hydrogen, X represents oxygen,  $R^1$  represents halogen, then  $R^2$  represents  $C_3$ -alkynyl,

10 whereby when A represents  $-(CO)-OC_2H_5$  or hydroxy, B represents hydrogen, X represents  $-NH-$ ,  $R^1$  represents  $-NO_2$ , then  $R^2$  represents  $C_3$ -alkynyl,

whereby when A represents  $-(CO)-OCH_3$ , then X represents oxygen,  $R^1$  represents halogen,  $R^2$  represents  $C_3$ -alkynyl and B represents  $-NH_2$ ,  $-NHC_2H_4OH$ ,  $-N(C_2H_4OH)_2$ ,  $-NH-(CO)-CH_2-O(CO)CH_3$ ,  
15

whereby when A represents  $-(CO)-OCH_3$ , then X represents  $-NH-$ ,  $R^1$  represents halogen,  $R^2$  represents  $-C_2H_4$ -imidazolyl and B represents hydrogen  $-NH_2$ ,

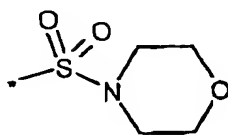
20 whereby when A represents  $-NHSO_2-CH_3$ , then B represents hydrogen, X represents  $-NH-$ ,  $R^1$  represents halogen and  $R^2$  represents  $-C_2H_4$ -imidazolyl,

whereby when  $R^1$  represents  $-COO$ -iso-propyl, then X represents  $-NH-$  and  $R^2$  represents  $C_3$ -alkynyl and A or B independently of one another represent the group  $-NO_2$  or  $-NH-(CO)-CF_3$ ,  
25

whereby when  $R^1$  represents halogen, X represents  $-NH-$ , B represents hydrogen and  $R^2$  represents  $C_{1-6}$ -alkyl substituted with  $-NH_2$ , then A represents  $-NH-(CO)-C_6$ -cycloalkyl- $NH_2$ ,

30 whereby when  $R^1$  represents halogen, X represents  $-NH-$ , B represents  $-S-CH_3$  and  $R^2$  represents imidazolyl,

then A represents the group



as well as all related isotopes, diastereomers, enantiomers, solvates, polymorphs or pharmaceutically acceptable salts thereof.

5

2. Compounds of general formula (I), according to claim 1

in which

A or B in each case independently of one another represent cyano, halogen, hydrogen, hydroxy, tetrazolyl or the group -NH<sub>2</sub>, -NR<sup>3</sup>R<sup>4</sup>, -C<sub>1-6</sub>-alkyl-NR<sup>3</sup>R<sup>4</sup>, -NH-C(NH)-CH<sub>3</sub>, -NH(CO)-R<sup>5</sup>, -NHCOOR<sup>6</sup>, -NR<sup>7</sup>-(CO)-NR<sup>8</sup>R<sup>9</sup>, -C<sub>1-6</sub>-alkyl-COOH, -COOH, -CONH<sub>2</sub>, -CONH-C<sub>1-6</sub>-alkyl-COOH,

10

or represent C<sub>1-6</sub>-alkyl optionally substituted in one or more places, the same way or differently with halogen, hydroxy or with the group -COOH, -CONR<sup>8</sup>R<sup>9</sup>, -NH-SO<sub>2</sub>-CH<sub>3</sub> or -NR<sup>8</sup>R<sup>9</sup>,

15

X represents the group -NH- or -NR<sup>3</sup>R<sup>4</sup>,

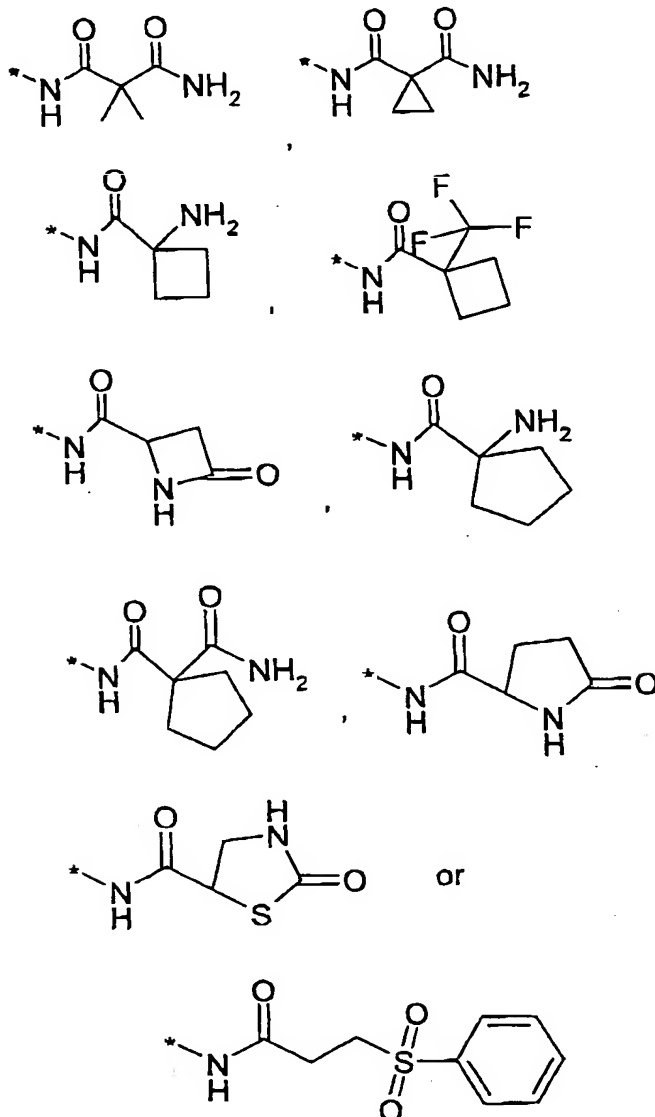
R<sup>1</sup> represents cyano, hydrogen, halogen or C<sub>1-6</sub>-alkyl, whereby the C<sub>1-6</sub>-alkyl can optionally be substituted in one or more places, in the same way or differently with halogen,

20

R<sup>2</sup> represents hydrogen or the group -NH-(CO)-aryl or -C<sub>1-6</sub>-alkyl optionally substituted in one or more places, the same way or differently with cyano, hydroxy, aryl, heteroaryl, C<sub>3-6</sub>-heterocycloalkylring which can be optionally be interrupted in one or more places with one or more nitrogen atoms, or substituted with the group -NR<sup>8</sup>R<sup>9</sup>, -NH-(CO)-NR<sup>8</sup>R<sup>9</sup>, -NH-(CO)-S-C<sub>1-6</sub>-alkyl, -NH-(CS)-NR<sup>8</sup>R<sup>9</sup>, -NH(CO)-R<sup>5</sup>, -NH(CO)-OR<sup>5</sup>, -(CO)-NH-NH<sub>2</sub>, -(CO)-NH-CH<sub>2</sub>-(CO)-NH<sub>2</sub>, -(CO)-NH-C<sub>1-6</sub>-alkyl, -COOH whereby the aryl or the heteroaryl can optionally be substituted in one or more places, the same way or differently with hydroxy, C<sub>1-6</sub>-alkyl, -NH<sub>2</sub>, -

25

$\text{NH}(\text{CO})\text{-CH}_2\text{-NH}_2$ ,  $\text{-NO}_2$ ,  $\text{-COOR}^6$ ,



$\text{R}^3$  or  $\text{R}^4$  in each case independently of one another represent hydrogen,  
 $\text{C}_{1-6}$ -alkyl optionally substituted in one or more places, the same  
 way or differently with hydroxy, phenyl or hydroxyphenyl,  
 or

$\text{R}^3$  and  $\text{R}^4$  together form a  $\text{C}_{3-6}$ -heterocycloalkylring containing at least one  
 nitrogen atom and optionally can be interrupted by one or more  
 oxygen and/or sulfur atoms and/or can be interrupted by one or  
 more  $\text{-(CO)-}$  groups in the ring and/or optionally can contain one  
 or more possible double bonds in the ring, whereby the  $\text{C}_{3-6}$ -

heterocycloalkylring can optionally be substituted with C<sub>1-6</sub>-alkyl,  
C<sub>1-6</sub>-alkyl-COOH or C<sub>1-6</sub>-alkyl-NH<sub>2</sub>,

R<sup>5</sup> represents hydrogen, C<sub>1-6</sub>-alkyl, C<sub>1-6</sub>-alkoxy, C<sub>2-6</sub>-alkenyl, C<sub>3-6</sub>-  
cycloalkylring, heteroaryl, the group -(CO)-NH<sub>2</sub> or C<sub>3-6</sub>-  
heterocycloalkylring that can optionally be interrupted with one or  
more nitrogen and/or oxygen and/or sulfur atoms and/or can be  
interrupted by one or more -(CO)- groups in the ring and/or  
optionally can contain one or more possible double bonds in the  
ring

and C<sub>1-6</sub>-alkyl, C<sub>2-6</sub>-alkenyl, C<sub>3-6</sub>-heterocycloalkylring define above,  
aryl or heteroaryl can optionally be substituted in one or more  
places, the same way or differently with halogen, hydroxy, C<sub>1-6</sub>-  
alkyl, C<sub>1-6</sub>-alkoxy, C<sub>3-6</sub>-cycloalkyl, C<sub>3-6</sub>-heterocycloalkylring define  
above, aryl, heteroaryl or with the -NR<sup>8</sup>R<sup>9</sup>, -NO<sub>2</sub>, -NR<sup>7</sup>-(CO)-R<sup>5</sup>, -  
NH(CO)-C<sub>1-6</sub>-alkyl-NH-(CO)-C<sub>1-6</sub>-alkyl, -NR<sup>7</sup>-(CO)-NR<sup>8</sup>R<sup>9</sup>, -CO-CH<sub>3</sub>,  
-COOH, -CO-NR<sup>8</sup>R<sup>9</sup>, -SO<sub>2</sub>-aryl, -SH, -S-C<sub>1-6</sub>-alkyl, -SO<sub>2</sub>-NR<sup>8</sup>R<sup>9</sup>,  
whereby aryl itself can optionally be substituted in one or more  
places, the same way or differently with halogen or hydroxy, C<sub>1-6</sub>-  
alkyl or C<sub>1-6</sub>-alkoxy,

R<sup>7</sup> represents hydrogen or C<sub>1-6</sub>-alkyl,

R<sup>8</sup> or R<sup>9</sup> in each case independently of one another represent hydrogen,  
C<sub>1-6</sub>-alkyl, aryl or heteroaryl or the group R<sup>10</sup>, whereby C<sub>1-6</sub>-alkyl,  
aryl or heteroaryl can optionally be substituted in one or more  
places, the same way or differently with halogen, heteroaryl,  
hydroxy, C<sub>1-6</sub>-alkoxy, hydroxy-C<sub>1-6</sub>-alkoxy or with the group -  
COOH, -NO<sub>2</sub>, or a C<sub>3-6</sub>-heterocycloalkylring can optionally be  
interrupted with one or more nitrogen and/or oxygen and/or sulfur  
atoms and/or can be interrupted by one or more -(CO)- groups in  
the ring and/or optionally can contain one or more possible double  
bonds in the ring

or

R<sup>8</sup> and R<sup>9</sup> together form a C<sub>3-6</sub>-heterocycloalkylring containing at least one  
nitrogen atom and optionally can be interrupted by one or more



oxygen and/or sulfur atoms and/or can be interrupted by one or more  $-(CO)-$  groups in the ring and/or optionally can contain one or more possible double bonds in the ring, whereby the  $C_{3-6}$ -heterocycloalkylring can optionally be substituted in one or more places, the same way or differently with hydroxy, hydroxy- $C_{1-6}$ -alkyl or the group  $-NR^8R^9$ ,  $-NH(CO)-R^5$  or  $-COOH$  and  $R^{10}$  represents  $-SO_2-NH_2$ ,  $-SO_2-C_{1-6}$ -alkyl,  $-SO_2$ -aryl, or  $-SO_2$ -heteroaryl,

whereby the aryl can be substituted with  $-C_{1-6}$ -alkyl, as well as all related isotopes, diastereomers, enantiomers, solvates, polymorphs or pharmaceutically acceptable salts thereof.

3. Compounds of general formula (I) according to claim 1 or 2 in which

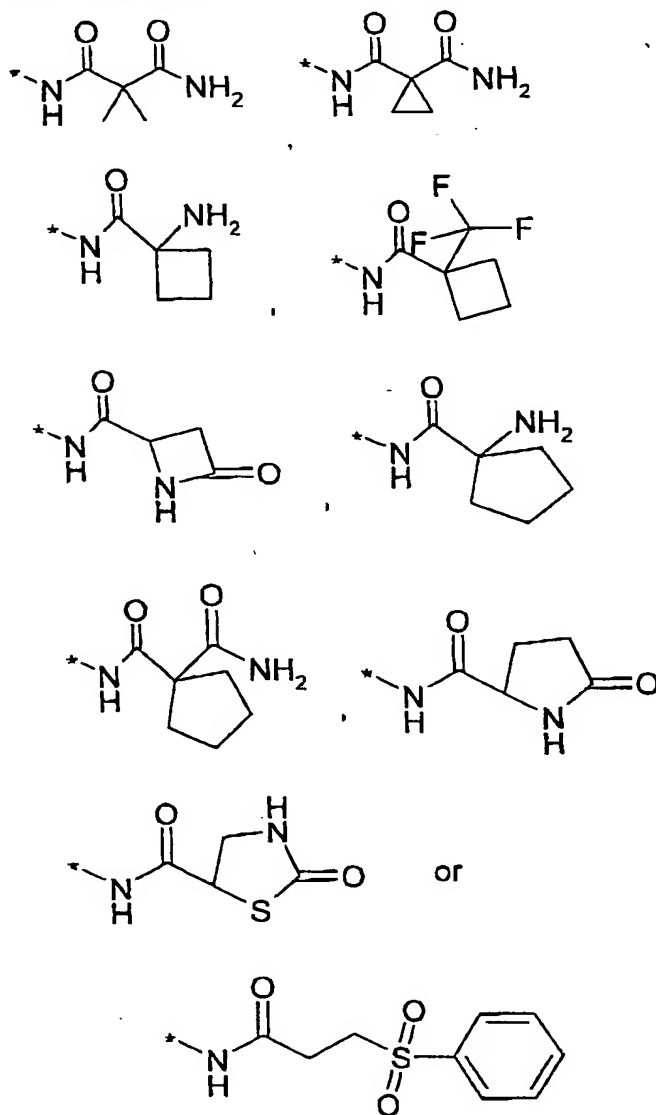
A or B in each case independently of one another represent hydrogen, tetrazolyl or the group  $-N(CH_3)_2$ ,  $-NH-(CO)$ -pyrrolidinyl,  $-NH-(CO)$ -pentyl,  $-NH-(CO)$ -hexyl,  $-NH-(CO)$ -hexyl- $NH_2$ ,  $-NH-(CO)-C_3H_7$ ,  $-NH-(CO)-CH_2$ -phenyl,  $-NH-(CO)-CH_2-NH_2$ ,  $-NH-(CO)-C_2H_4-NH_2$ ,  $-NH-(CO)-CH(NH_2)-CH_3$ ,  $-NH-(CO)-CH(NH_2)$ -hydroxyphenyl,  $-NH-(CO)-CH(NH_2)-CH_2$ -hydroxyphenyl,  $-NH-(CO)-CH(NH-(CO)-CH_3)-CH_2$ -phenyl,  $-NH-(CO)-CH_2-NH-(CO)-CH_3$ ,  $-NH-(CO)-N(C_2H_5)(C_2H_4$ -piperidinyl),  $-NH-(CO)-N(CH_3)(C_2H_4$ -piperidinyl),  $-NH-(CO)-CH_2-NH(CH_3)$ ,  $-CH_2-N(CH_3)_2$ ,  $-NH-(CO)NH-CH_2-COOH$ , hydantoinyl,  $-CH_2-COOH$  whereby the pyrrolidinyl can optionally be substituted with hydroxy or the group  $-NH_2$ ,  $-N(CH_3)_2$  or  $-NH-(CO)-CH_3$ , and whereby hydantoinyl can be substituted with  $-CH_3$ ,  $-CH_2-COOH$ , or  $-(CO)$ -thiazolidinonyl,

X represents or the group  $-NH-$ .

$R^1$  represents halogen and

$R^2$  represents hydrogen or the group  $-NH-(CO)$ -phenyl or  $-C_2H_4-$ ,  $-C_3H_6-$  both can optionally be substituted in one or more places, the same way or differently with cyano, hydroxy, phenyl,

naphthyl, imidazolyl, thiazolyl, pyridyl, 2-oxazolynyl, piperidinyl, -  
 NH<sub>2</sub>, -NH-CH<sub>2</sub>-thienyl, -NH-pyridinyl-NO<sub>2</sub>, -NH-thiazolyl, -SO<sub>2</sub>-  
 thienyl, -SO<sub>2</sub>-NH<sub>2</sub>, -SO<sub>2</sub>-CH<sub>3</sub>, -SO<sub>2</sub>-C<sub>3</sub>H<sub>7</sub>, pyrrolidinonyl substituted  
 with -COOH, -NH-(CO)-NH-thienyl, -NH-(CO)-NH-phenyl, -NH-  
 (CO)-NH-C<sub>2</sub>H<sub>5</sub>, -NH-(CO)-C(CH<sub>3</sub>)<sub>3</sub>, -NH-(CO)-S-C<sub>2</sub>H<sub>5</sub>, -NH-(CS)-  
 NH-C<sub>2</sub>H<sub>5</sub>, -NH-(CO)-C<sub>2</sub>H<sub>5</sub>, -NH-(CO)-thienyl, -(CO)-NH-NH<sub>2</sub>, -  
 (CO)-NH-CH<sub>2</sub>-(CO)-NH<sub>2</sub>, -(CO)-NH-C<sub>2</sub>H<sub>5</sub>, -COOH whereby the  
 phenyl or the imidazolyl, thiazolyl can optionally be substituted in  
 one or more places, the same way or differently with hydroxy, -  
 CH<sub>3</sub>, -NH-(CO)-CH<sub>2</sub>-NH<sub>2</sub>, -COOC<sub>2</sub>H<sub>5</sub>, -COOC(CH<sub>3</sub>)<sub>3</sub>,



as well as all related isotopes, diastereomers, enantiomers, solvates, polymorphs or pharmaceutically acceptable salts thereof.

4. Compounds of general formula (I) according to any one of claims 1 to 3

5 in which

A or B in each case independently of one another represent hydrogen or the group -NH-(CO)-pyrrolidinyl, -NH-(CO)-piperidinyl, -NH-(CO)-morpholinyl, -NH-(CO)-hexyl-NH<sub>2</sub>, -NH-(CO)-CH(NH<sub>2</sub>)-hydroxyphenyl, -NH-(CO)-CH(NH<sub>2</sub>)-CH<sub>2</sub>-hydroxyphenyl, hydantoin optionally substituted with -CH<sub>3</sub>,

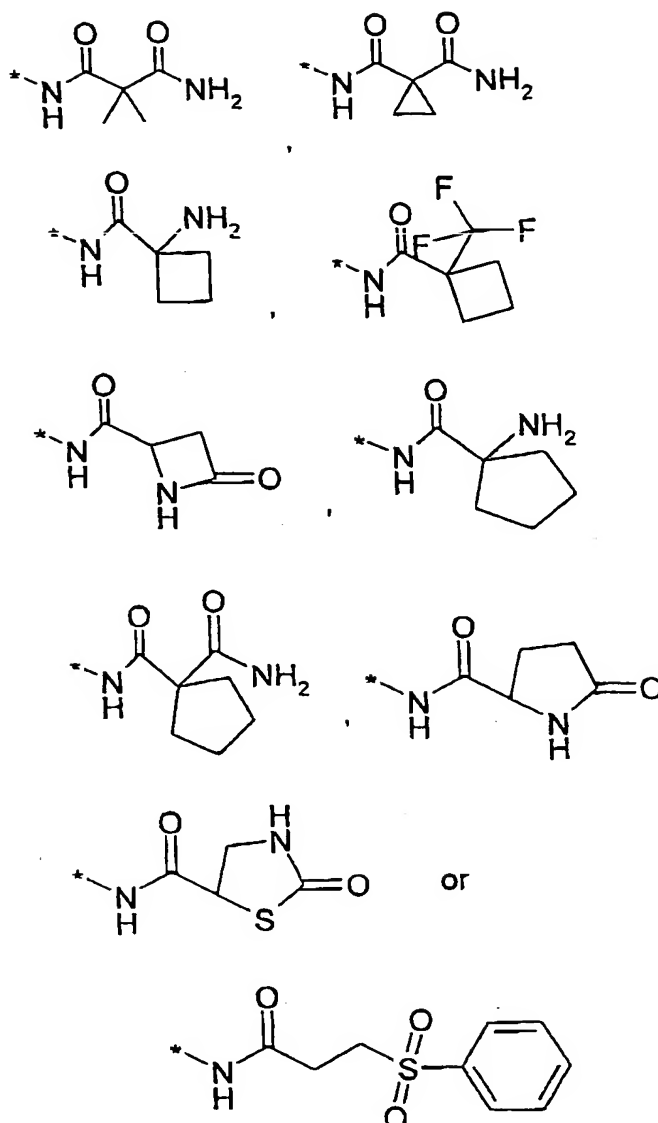
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X represents or the group -NH-,

R<sup>1</sup> represents halogen and

R<sup>2</sup> represents hydrogen, -C<sub>2</sub>H<sub>4</sub>-imidazolyl or -C<sub>3</sub>H<sub>7</sub> which can optionally be substituted in one or more places, the same way or differently with the group -NH-CH<sub>2</sub>-thienyl, -NH-(CO)-C<sub>2</sub>H<sub>5</sub>, -NH-(CO)-C(CH<sub>3</sub>)<sub>3</sub>,

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as well as all related isotopes, diastereomers, enantiomers, solvates, polymorphs or pharmaceutically acceptable salts thereof.

5

5. Compounds of general formula (I) according to claim 4,

**N-[3-[[5-bromo-4-[[3-[[1-(trifluoromethyl)cyclobutyl]carbonyl]amino]propyl]amino]-2-pyrimidinyl]amino]phenyl]-1-pyrrolidinecarboxamide,**

10

N-[3-[[5-bromo-4-[[3-[[1-oxo-3-(phenylsulfonyl)propyl]amino]propyl]amino]-2-pyrimidinyl]amino]phenyl]-1-pyrrolidinecarboxamide,

N-[3-[[5-bromo-2-[[3-[(1-pyrrolidinylcarbonyl)amino]phenyl]amino]-4-

pyrimidinyl]amino]propyl]-2,2-dimethyl-propanediamide,  
N-[3-[[4-[[3-[[[(1-aminocyclopentyl)carbonyl]amino]propyl]amino]-5-bromo-2-  
pyrimidinyl]amino]phenyl]-1-pyrrolidinecarboxamide,  
N-[3-[[4-[[3-[[[(1-aminocyclobutyl)carbonyl]amino]propyl]amino]-5-iodo-2-  
5 pyrimidinyl]amino]phenyl]-1-pyrrolidinecarboxamide,  
N<sup>1</sup>-[3-[[5-bromo-2-[[3-[(1-pyrrolidinylcarbonyl)amino]phenyl]amino]-4-  
pyrimidinyl]amino]propyl]-1,1-cyclopentanedicarboxamide,  
(4R)-N-[3-[[5-bromo-2-[[3-(2,5-dioxo-1-imidazolidinyl)phenyl]amino]-4-  
pyrimidinyl]amino]propyl]-2-oxo-4-thiazolidinecarboxamide,  
10 (4R)-N-[3-[[5-bromo-2-[[3-(3-methyl-2,5-dioxo-1-  
imidazolidinyl)phenyl]amino]-4-pyrimidinyl]amino]propyl]-2-oxo-4-  
thiazolidinecarboxamide,  
3-[3-[[5-bromo-4-[[2-(1H-imidazol-4-yl)ethyl]amino]-2-  
pyrimidinyl]amino]phenyl]-2,4-imidazolidinedione,  
15 3-[3-[[5-bromo-4-[[2-(1H-imidazol-4-yl)ethyl]amino]-2-  
pyrimidinyl]amino]phenyl]-1-methyl-2,4-imidazolidinedione,  
N'-[3-[[5-bromo-4-[[2-(1H-imidazol-4-yl)ethyl]amino]-2-  
pyrimidinyl]amino]phenyl]-N-ethyl-N-[2-(1-piperidinyl)ethyl]-urea,  
N-[3-[[5-bromo-4-[[3-[(2,2-dimethyl-1-oxopropyl)amino]propyl]amino]-2-  
20 pyrimidinyl]amino]phenyl]-1-pyrrolidinecarboxamide,  
N-[3-[[2-[[3-[[[(2S)-2-amino-3-(4-hydroxyphenyl)-1-  
oxopropyl]amino]phenyl]amino]-5-bromo-4-pyrimidinyl]amino]propyl]-2,2-  
dimethyl-propanediamide,  
N-[3-[[2-[[3-[[[(1-aminocyclohexyl)carbonyl]amino]phenyl]amino]-5-bromo-4-  
25 pyrimidinyl]amino]propyl]-2,2-dimethyl-propanediamide,  
N-[3-[[2-[[3-[[[(2S)-2-amino-2-phenylacetyl]amino]phenyl]amino]-5-bromo-4-  
pyrimidinyl]amino]propyl]-2,2-dimethyl-propanediamide,  
N-[3-[[2-[[3-[[[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]phenyl]amino]-5-  
bromo-4-pyrimidinyl]amino]propyl]-5-oxo-2-pyrrolidinecarboxamide,  
30 N-[3-[[2-[[3-[[[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]phenyl]amino]-5-  
bromo-4-pyrimidinyl]amino]propyl]-2,2-dimethyl-propanediamide,  
N<sup>1</sup>-[3-[[5-bromo-2-[[3-[[[(2S)-2-pyrrolidinylcarbonyl]amino]phenyl]amino]-4-  
pyrimidinyl]amino]propyl]-1,1-cyclopropanedicarboxamide,

N-[3-[[5-bromo-2-[[3-(2,5-dioxo-1-imidazolidinyl)phenyl]amino]-4-pyrimidinyl]amino]propyl]-2,2-dimethyl-propanediamide,  
N-(3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)phenyl)-4-morpholinecarboxamide,  
5 N-(3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)phenyl)-1-pyrrolidinecarboxamide,  
N-(3-((5-bromo-4-((3-((2-thienylcarbonyl)amino)propyl)amino)-2-pyrimidinyl)amino)phenyl)-1-pyrrolidinecarboxamide,  
N1-(3-((5-bromo-2-((3-((1-pyrrolidinylcarbonyl)amino)phenyl)amino)-4-pyrimidinyl)amino)propyl)-1,1-cyclopropanedicarboxamide,  
10 N-(3-((5-bromo-4-((3-((1-oxopropyl)amino)propyl)amino)-2-pyrimidinyl)amino)phenyl)-1-pyrrolidinecarboxamide,  
N-(3-((5-iodo-4-((3-((2-thienylcarbonyl)amino)propyl)amino)-2-pyrimidinyl)-amino)phenyl)-1-pyrrolidinecarboxamide,  
15 N-[3-[[5-bromo-4-[[3-[[[(2S)-5-oxo-2-pyrrolidinyl]carbonyl]amino]propyl]amino]-2-pyrimidinyl]amino]phenyl]-1-pyrrolidinecarboxamide,  
N-[3-[[5-bromo-4-[[3-[[[(2S)-4-oxo-2-azetidyl]carbonyl]amino]propyl]amino]-2-pyrimidinyl]amino]phenyl]-1-pyrrolidinecarboxamide,  
20 (4R)-N-[3-[[5-bromo-2-[[3-[(1-pyrrolidinylcarbonyl)amino]phenyl]amino]-4-pyrimidinyl]amino]propyl]-2-oxo-4-thiazolidinecarboxamide or  
N-[3-[[4-[[3-[[[(1-aminocyclobutyl)carbonyl]amino]propyl]amino]-5-bromo-2-pyrimidinyl]amino]phenyl]-1-pyrrolidinecarboxamide.

- 25 6. Compounds of general formula (I) according to claim 1,  
in which

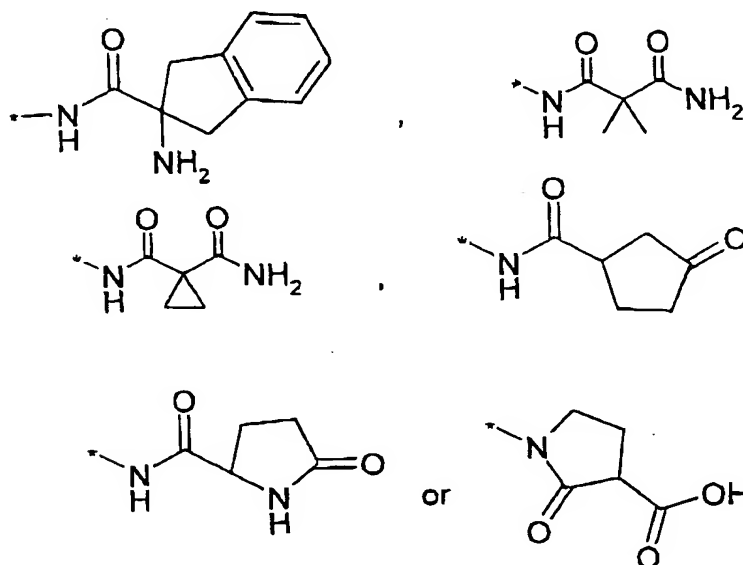
A or B in each case independently of one another represent hydrogen or the group -NO<sub>2</sub>, -NH<sub>2</sub>, -NR<sup>3</sup>R<sup>4</sup>, -N(C<sub>1-6</sub>-hydroxyalkyl)<sub>2</sub>, -NH(CO)-R<sup>5</sup>, -NHCOOR<sup>6</sup>, -NR<sup>7</sup>-(CO)-NR<sup>8</sup>R<sup>9</sup>, -NR<sup>7</sup>-(CS)-NR<sup>8</sup>R<sup>9</sup>, -COOR<sup>5</sup>, -CO-NR<sup>8</sup>R<sup>9</sup>, -SO<sub>2</sub>-CH<sub>3</sub>, 4-bromo-1-methyl-1H-pyrazolo-3yl  
30 or C<sub>1-6</sub>-alkyl optionally substituted in one or more places, the same way or differently with cyano, halogen, hydroxy or the group -NH<sub>2</sub>.

$-\text{NH}-(\text{CO})-\text{R}^5$ ,  $-\text{SO}_2-\text{NHR}^3$ ,  $-\text{COOR}^5$ ,  $-\text{CONR}^8\text{R}^9$ ,  $-\text{O}-(\text{CO})-\text{R}^5$ ,  $-\text{O}-(\text{CO})-\text{C}_{1-6}\text{-alkyl}-\text{R}^5$ ,

X represents an oxygen atom or the group  $-\text{NH}-$ ,

R<sup>1</sup> represents hydrogen, halogen, hydroxymethyl or the group  $-\text{COOH}$ ,  $-\text{COO-iso-propyl}$ ,  $-\text{NO}_2$ ,  $-\text{NH}-(\text{CO})-(\text{CH}_2)_2-\text{COOH}$  or  $-\text{NH}-(\text{CO})-(\text{CH}_2)_2-\text{COO}-\text{C}_{1-6}\text{-alkyl}$ ,

R<sup>2</sup> represents  $\text{C}_{1-6}\text{-alkyl}$  optionally substituted in one or more places, the same way or differently with hydroxy, imidazolyl or the group  $-\text{NH}_2$ ,  $-\text{NH}-(\text{CO})\text{O}-\text{CH}_2\text{-phenyl}$ ,  $-\text{NH}-(\text{CO})\text{H}$ ,  $-\text{NH}-(\text{CO})\text{-phenyl}$ ,  $-\text{NH}-(\text{CO})-\text{CH}_2\text{-O-phenyl}$ ,  $-\text{NH}-(\text{CO})-\text{CH}_2\text{-phenyl}$ ,  $-\text{NH}-(\text{CO})-\text{CH}(\text{NH}_2)\text{CH}_2\text{-phenyl}$ ,  $-\text{NH}-(\text{CO})-\text{CH}_2-\text{CH}(\text{CH}_3)\text{-phenyl}$ ,  $-\text{NH}-(\text{CO})-\text{CH}(\text{NH}_2)-(\text{CH}_2)_2-\text{COOH}$ ,



, whereby the phenyl can optionally be substituted in one or more places, the same or differently with halogen,  $\text{C}_{1-6}\text{-alkyl}$  or  $-(\text{CO})-\text{C}(\text{CH}_2)-\text{C}_2\text{H}_5$ , or represents  $\text{C}_3\text{-alkinyl}$ ,

R<sup>3</sup> or R<sup>4</sup> in each case independently of one another represent hydrogen or  $\text{C}_{1-6}\text{-alkyl}$  optionally substituted in one or more places, the same way or differently with hydroxy, phenyl or hydroxyphenyl, or

R<sup>3</sup> and R<sup>4</sup> together form a  $\text{C}_{3-6}\text{-heterocycloalkylring}$  containing at least one nitrogen atom and optionally can be interrupted by one or more

oxygen and/or sulfur atoms and/or can be interrupted by one or more  $-(CO)-$  groups in the ring and/or optionally can contain one or more possible double bonds in the ring, whereby the  $C_{3-6}$ -heterocycloalkylring can optionally be substituted with  $C_{1-6}$ -alkyl,

$C_{1-6}$ -alkyl-COOH or  $C_{1-6}$ -alkyl-NH<sub>2</sub>,

$R^5$  represents  $C_{1-6}$ -alkyl,  $C_{2-6}$ -alkenyl,  $C_{3-6}$ -cycloalkyl or phenyl each can optionally be substituted in one or more places, the same way or differently with halogen, hydroxy, phenyl or with the group  $-NH_2$ ,  $-NH(CO)-O-C_{1-6}$ -alkyl, whereby phenyl itself can optionally be substituted in one or more places, the same way or differently with halogen, hydroxy or  $C_{1-6}$ -alkyl,

$R^6$  represents  $C_{1-6}$ -alkyl,  $C_{2-6}$ -alkenyl or phenyl,

$R^7$  represents hydrogen or  $C_{1-6}$ -alkyl and

$R^8$  or  $R^9$  in each case independently of one another represent hydrogen,  $C_{1-6}$ -alkyl,  $C_{2-6}$ -alkenyl,  $C_{3-6}$ -cycloalkyl, aryl or phenyl, whereby aryl or phenyl can optionally be substituted in one or more places, the same way or differently with hydroxy or the group  $-NO_2$  or  $-N(C_{1-6}$ -alkyl)<sub>2</sub>

or

$R^8$  and  $R^9$  together form a  $C_{3-6}$ -heterocycloalkylring containing at least one nitrogen atom and optionally can be interrupted by one or more oxygen and/or sulfur atoms and/or can be interrupted by one or more  $-(CO)-$  groups in the ring and/or optionally can contain one or more possible double bonds in the ring, whereby the  $C_{3-6}$ -heterocycloalkylring can optionally be substituted with the group  $-NH_2$ ,

as well as all related isotopes, diastereomers, enantiomers, solvates, polymorphs or pharmaceutically acceptable salts thereof.

7. Compounds of general formula (I) according to claim 1 or 6 in which

A or B in each case independently of one another represent hydrogen or the group  $-NH-C_2H_4-OH$ ,  $-NH-CH_2$ -hydroxyphenyl,  $-NH-(CO)-$



pyrrolidinyl, -NH-(CO)-CH(NH<sub>2</sub>)-CH<sub>2</sub>-phenyl, -NH-(CO)-pentyl-NH<sub>2</sub>,  
 -NH-(CO)-hexyl-NH<sub>2</sub>, -NH-(CO)-CH<sub>2</sub>-NH<sub>2</sub>, -NH-(CO)-CH(NH<sub>2</sub>)-  
 hydroxyphenyl, -NH-(CO)-CH<sub>2</sub>-hydroxyphenyl, -NH-(CO)-CH<sub>2</sub>-  
 methylphenyl, -NH-(CO)-C<sub>2</sub>H<sub>4</sub>-dihydroxyphenyl, -NH-(CO)-  
 CH(OH)-phenyl, -NH-(CO)-CH(NH<sub>2</sub>)-CH<sub>2</sub>(OH), -NH-(CO)-  
 C(CH<sub>3</sub>)<sub>2</sub>NH<sub>2</sub>, -NH-(CO)-NH(C<sub>2</sub>H<sub>5</sub>), -CH<sub>2</sub>OH, -(CO)-NH-cyclopropyl,  
 -(CO)-NH-CH(CH<sub>3</sub>)<sub>2</sub>,

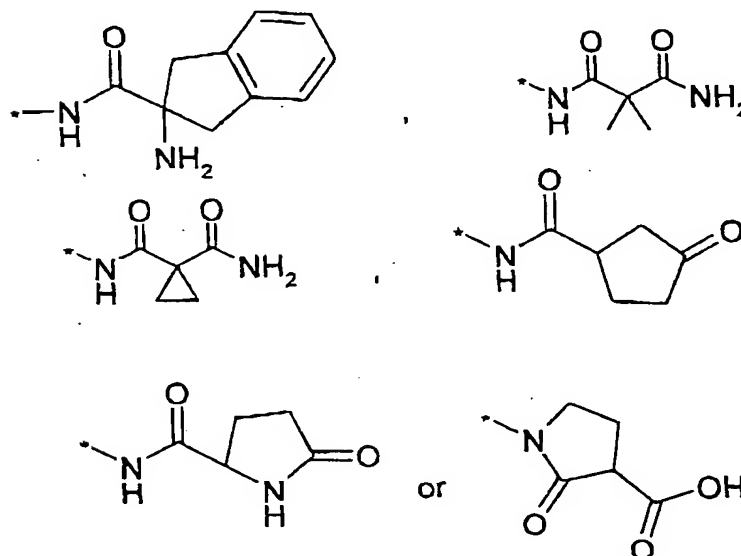
whereby the pyrrolidinyl can optionally be substituted with hydroxy  
 or the group -NH<sub>2</sub>,

X represents an oxygen atom or the group -NH-,

R<sup>1</sup> represents halogen or hydroxymethyl and

R<sup>2</sup> represents -C<sub>2</sub>H<sub>5</sub> optionally substituted in one or more places, the  
 same way or differently with hydroxy, imidazolyl

or represents -C<sub>3</sub>H<sub>7</sub> or -C<sub>4</sub>H<sub>8</sub> optionally substituted in one or more  
 places, the same way or differently with the group -NH<sub>2</sub>, -NH-  
 (CO)-CH(NH<sub>2</sub>)-C<sub>2</sub>H<sub>4</sub>-COOH, -NH-(CO)-phenyl, -NH-(CO)-CH<sub>2</sub>-  
 phenyl, -NH-(CO)-CH<sub>2</sub>-CH(CH<sub>3</sub>)-phenyl, -NH-(CO)-CH<sub>2</sub>-O-phenyl,  
 -NH-(CO)O-CH<sub>2</sub>-phenyl, -NH-(CO)-CH(NH<sub>2</sub>)CH<sub>2</sub>-phenyl,



whereby the phenyl can optionally be substituted in one or more  
 places, the same or differently with halogen, -CH<sub>3</sub> or -(CO)-

$C(CH_2)(C_2H_5)$ .

or represents  $C_3$ -alkinyl,

as well as all related isotopes, diastereomers, enantiomers, solvates, polymorphs or pharmaceutically acceptable salts thereof.

5

8. Compounds of general formula (I) according to claim 7,

N-[3-[[2-[[3-[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]phenyl]amino]-5-bromo-4-pyrimidinyl]amino]propyl]-2,2-dimethyl-propanediamide,

1-[3-[[2-[[3-[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]phenyl]amino]-5-bromo-4-pyrimidinyl]amino]propyl]-2-oxo-3-pyrrolidinecarboxylic acid,

10

N-[3-[[5-bromo-4-[[3-[(5-oxo-2-pyrrolidinyl)carbonyl]amino]propyl]amino]-2-pyrimidinyl]amino]phenyl]-1-pyrrolidinecarboxamide,

Pyrrolidine-1-carboxylic acid [3-(5-bromo-4-{3-[2-(2,4-dichloro-phenyl)-acetyl-amino]-propyl-amino}-pyrimidin-2-yl-amino)-phenyl]-amide,

15

Pyrrolidine-1-carboxylic acid [3-(5-bromo-4-{3-[2-(4-bromo-phenyl)-acetyl-amino]-propyl-amino}-pyrimidin-2-yl-amino)-phenyl]-amide,

Pyrrolidine-1-carboxylic acid (3-{5-bromo-4-[3-(2-p-tolyl-acetyl-amino)-propyl-amino]-pyrimidin-2-yl-amino}-phenyl)-amide,

Pyrrolidine-1-carboxylic acid [3-(5-bromo-4-{3-[2-(2,4-difluoro-phenyl)-acetyl-amino]-propyl-amino}-pyrimidin-2-yl-amino)-phenyl]-amide,

20

Pyrrolidine-1-carboxylic acid {3-[5-bromo-4-(3-[2-[2,3-dichloro-4-(2-methylene-butyryl)-phenoxy]-acetyl-amino]-propyl-amino)-pyrimidin-2-yl-amino]-phenyl}-amide,

Pyrrolidine-1-carboxylic acid [3-(5-bromo-4-{3-[3-(2,3-dichloro-phenyl)-butyrylamino]-propyl-amino}-pyrimidin-2-yl-amino)-phenyl]-amide,

25

Pyrrolidine-1-carboxylic acid (3-{5-bromo-4-[3-(3-bromo-benzoylamino)-propyl-amino]-pyrimidin-2-yl-amino}-phenyl)-amide,

N-(3-((4-((4-aminobutyl)amino)-5-bromo-2-pyrimidinyl)amino)phenyl)-1-pyrrolidinecarboxamide,

30

N-[3-[[2-[[3-[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]phenyl]amino]-5-bromo-4-pyrimidinyl]amino]propyl]-2,2-dimethyl-propanediamide,

N-[3-[[[(2S)-2-Amino-1-oxo-3-phenylpropyl]amino]-5-[[5-bromo-4-(prop-2-ynyloxy)pyrimidin-2-yl]amino]phenyl]pyrrolidine-1-carboxamide,

*N*-[3-[[*(2R)*-2-Amino-1-oxo-3-phenylpropyl]amino]-5-[[5-bromo-4-(prop-2-ynyloxy)pyrimidin-2-yl]amino]phenyl]pyrrolidine-1-carboxamide,  
( $\alpha R$ )- $\alpha$ -Amino-*N*-[3-[[5-bromo-4-(prop-2-ynyloxy)pyrimidin-2-yl]amino]-5-(hydroxymethyl)phenyl]benzenepropanamide,  
5 2-[3-(5-Bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-5-hydroxymethyl-phenylamino]-ethanol,  
(*2R*)-Amino-*N*-[3-hydroxymethyl-5-(4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenyl]-3-phenyl-propionamide,  
3-((*2R*)-Amino-3-phenyl-propionylamino)-5-(5-bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)- *N*-cyclopropyl-benzamide,  
10 3-((*2R*)-Amino-3-phenyl-propionylamino)-5-(5-bromo-4-prop-2-ynyloxy-pyrimidin-2-ylamino)- *N*-isopropyl-benzamide,  
Phenylmethyl [3-[[2-[[3-[[*(ethylamino)*carbonyl]amino]phenyl]amino]-5-(hydroxymethyl)pyrimidine-4-yl]amino]propyl]carbamate,  
15 Pyrrolidine-1-carboxylic acid (3-{4-[3-((*2R*)-amino-3-phenyl-propionylamino)-propylamino]-5-bromo-pyrimidine-2-ylamino}-phenyl)-amide,  
Pyrrolidine-1-carboxylic acid (3-{4-[3-((*2S*)-amino-3-phenyl-propionylamino)-propylamino]-5-bromo-pyrimidine-2-ylamino}-phenyl)-amide,  
2-[3-(5-Bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenylamino]-ethanol,  
20 1-Amino-cyclopentancarboxylic acid[3-(5-bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenyl]-amide,  
1-Amino-cyclohexancarboxylic acid-[3-(5-bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenyl]-amide,  
(*2S*)-Amino-*N*-[3-(5-bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenyl]-3-phenyl-propionamide,  
25 (*2R*)-Amino-*N*-[3-(5-bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenyl]-3-phenyl-propionamide,  
2-[[3-(5-Bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenylamino]-methyl]-phenol,  
(*2R*)-Amino-*N*-[3-(5-bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenyl]-3-(4-hydroxy-phenyl)-propionamide,  
30 *N*-[3-(5-Bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenyl]-3-(3,4-dihydroxy-phenyl)-propionamide,

N-[3-(5-Bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenyl]-2-hydroxy-  
(2S)-phenyl-acetamide,

N-[3-(5-Bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenyl]-2-hydroxy-  
(2R)-phenyl-acetamide,

5 (2S)-Amino-N-[3-(5-bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenyl]-3-  
hydroxy-propionamide,

(2R)-Amino-N-[3-(5-bromo-4-prop-2-ynyloxy-pyrimidin-2-ylamino)-phenyl]-3-  
hydroxy-propionamide,

10 2-Amino-N-[3-(5-bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenyl]-2-  
methyl-propionamide,

(2S)-Amino-N-[3-(5-bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenyl]-3-  
(4-hydroxy-phenyl)-propionamide,

(2S)-Amino-N-[3-(5-bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenyl]-3-  
p-tolyl-propionamide or

15 (2R)-Amino-N-[3-(5-bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenyl]-3-  
p-tolyl-propionamide.

9. Compounds of general formula (I) according to claim 1  
in which

20 A or B in each case independently of one another represent halogen,  
hydrogen or the group -SO<sub>2</sub>-CH<sub>3</sub>, -NO<sub>2</sub>, -NH<sub>2</sub>, -CF<sub>3</sub>, -CH<sub>2</sub>-NH-  
(CO)-NH<sub>2</sub>, -CH<sub>2</sub>-pyrrolidinyl, -NH-(CO)-CH<sub>3</sub>, -NH-(CO)-hexyl-NH<sub>2</sub>, -  
NH-(CO)-phenyl, -NH-(CO)-pyrrolidinyl, -NH-(CO)-CH(NH<sub>2</sub>)-CH<sub>2</sub>-  
phenyl, NH-(CO)-OCH<sub>3</sub>, -NH-(CO)-OCH(CH<sub>3</sub>)<sub>2</sub>, -NH-(CO)-OC<sub>2</sub>H<sub>4</sub>-  
25 morpholino, -NH-(CO)-NH-cyclopropyl, -NH-(CO)-morpholino, -NH-  
(CO)-NH-C<sub>2</sub>H<sub>4</sub>-morpholino, -NH-(CO)-NH-hydroxycycloalkyl,  
hydantoinyl,

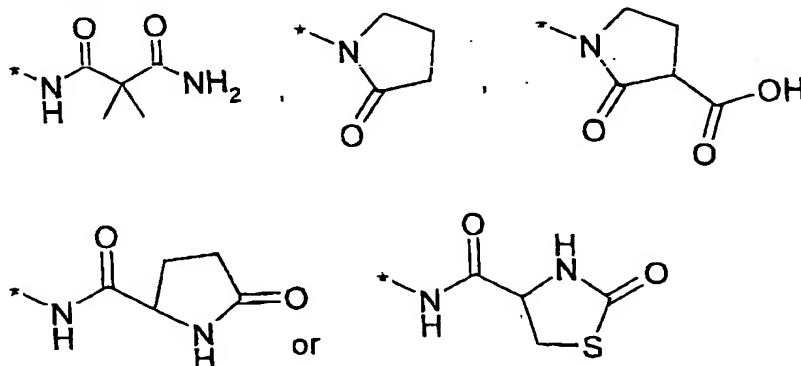
whereby the pyrrolidinyl can optionally be substituted with hydroxy  
or the group -NH<sub>2</sub> and

30 whereby the hydantoinyl can optionally be substituted with the  
group -CH<sub>3</sub> or -(CO)-thiazolidinonyl,

X represents the group -NH-,

R<sup>1</sup> represents halogen and

$R^2$  represents  $-\text{CH}_2$ -dihydroxyphenyl,  $-\text{C}_2\text{H}_4$ -imidazolyl, or  $-\text{C}_3\text{H}_7$  optionally substituted in one or more places, the same way or differently with



as well as all related isotopes, diastereomers, enantiomers, solvates, polymorphs or pharmaceutically acceptable salts thereof.

10. Compounds of general formula (I) according to claim 7,

- 4-((4-((2-(1H-imidazol-4-yl)ethyl)amino)-5-iodo-2-pyrimidinyl)amino)-benzenesulfonamide,
- 10 N-((3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)phenyl)methyl)-urea,
- 1-((3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)phenyl)methyl)-3-pyrrolidinol,
- 15 (3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)phenyl)-carbamic acid methyl ester,
- N2-(3-aminophenyl)-5-bromo-N4-(2-(1H-imidazol-4-yl)ethyl)-2,4-pyrimidinediamine,
- N-(3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)phenyl)-N'-cyclopropyl-urea,
- 20 N-(3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)phenyl)-4-morpholinecarboxamide,
- (3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)phenyl)-carbamic acid 1-methylethyl ester,
- 25 N-(3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)phenyl)-methanesulfonamide,
- N2-(3-amino-5-(trifluoromethyl)phenyl)-5-bromo-N4-(2-(1H-imidazol-4-

yl)ethyl)-2,4-pyrimidinediamine,  
N-(3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-  
pyrimidinyl)amino)phenyl)-N'-(2-(4-morpholinyl)ethyl)-urea,  
N2-(3-amino-5-chlorophenyl)-5-bromo-N4-(2-(1H-imidazol-4-yl)ethyl)-2,4-  
5 pyrimidinediamine,  
(3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-  
pyrimidinyl)amino)phenyl)-carbamic acid 2-(4-morpholinyl)ethyl ester,  
N-(3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-  
pyrimidinyl)amino)phenyl)-N'-(4-hydroxycyclohexyl)-urea,  
10 N-(3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-  
pyrimidinyl)amino)phenyl)-acetamide,  
N-(3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-  
pyrimidinyl)amino)phenyl)-benzamide,  
(4R)-N-[3-[[5-bromo-2-[[3-[(1-pyrrolidinylcarbonyl)amino]phenyl]amino]-4-  
15 pyrimidinyl]amino]propyl]-2-oxo-4-thiazolidinecarboxamide,  
3-[3-[[5-bromo-4-[[2-(1H-imidazol-4-yl)ethyl]amino]-2-  
pyrimidinyl]amino]phenyl]-2,4-imidazolidinedione,  
3-[3-[[5-bromo-4-[[2-(1H-imidazol-4-yl)ethyl]amino]-2-  
pyrimidinyl]amino]phenyl]-1-methyl-2,4-imidazolidinedione,  
20 1-[3-[[2-[[3-[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]phenyl]amino]-5-  
bromo-4-pyrimidinyl]amino]propyl]-2-oxo-3-pyrrolidinecarboxylic acid,  
1-[3-[[2-[[3-[(1-aminocyclohexyl)carbonyl]amino]phenyl]amino]-5-bromo-4-  
pyrimidinyl]amino]propyl]-2-oxo-3-pyrrolidinecarboxylic acid,  
N-[3-[[2-[[3-[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]phenyl]amino]-5-  
25 bromo-4-pyrimidinyl]amino]propyl]-5-oxo-2-pyrrolidinecarboxamide,  
N-[3-[[2-[[3-[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]phenyl]amino]-5-  
chloro-4-pyrimidinyl]amino]propyl]-2,2-dimethyl-propanediamide,  
3-[3-[[5-bromo-4-[(3,4-dihydroxyphenyl)methyl]amino]-2-  
pyrimidinyl]amino]phenyl]-2,4-imidazolidinedione,  
30 3-[3-[[5-bromo-4-[(3,4-dihydroxyphenyl)methyl]amino]-2-  
pyrimidinyl]amino]phenyl]-1-methyl-2,4-imidazolidinedione,  
(4R)-N-[3-[[5-bromo-2-[[3-(2,5-dioxo-1-imidazolidinyl)phenyl]amino]-4-  
pyrimidinyl]amino]propyl]-2-oxo-4-thiazolidinecarboxamide,

N-[3-[[5-bromo-2-[[3-(2,5-dioxo-1-imidazolidinyl)phenyl]amino]-4-pyrimidinyl]amino]propyl]-5-oxo-2-pyrrolidinecarboxamide,  
N-[3-[[5-bromo-2-[[3-(2,5-dioxo-1-imidazolidinyl)phenyl]amino]-4-pyrimidinyl]amino]propyl]-2,2-dimethyl-propanediamide,  
3-[3-[[5-bromo-4-[[3-(2-oxo-1-pyrrolidinyl)propyl]amino]-2-pyrimidinyl]amino]phenyl]-2,4-imidazolidinedione,  
(4R)-N-[3-[[5-bromo-2-[[3-(3-methyl-2,5-dioxo-1-imidazolidinyl)phenyl]amino]-4-pyrimidinyl]amino]propyl]-2-oxo-4-thiazolidinecarboxamide or  
(4R)-N-[3-[[5-bromo-2-[[3-[2,5-dioxo-3-[[4R)-2-oxo-4-thiazolidinyl]carbonyl]-1-imidazolidinyl]phenyl]amino]-4-pyrimidinyl]amino]propyl]-2-oxo-4-thiazolidinecarboxamide.

11. A compound of following structure

N-(3-((4-((3-(aminomethyl)phenyl)amino)-5-bromo-2-pyrimidinyl)amino)phenyl)-1-pyrrolidine-carboxamide,  
4-[[5-bromo-4-[[2-(1H-imidazol-5-yl)ethyl]amino]-2-pyrimidinyl]amino]-1-naphthaleneacetic acid,  
5-[[5-bromo-4-[[2-(1H-imidazol-5-yl)ethyl]amino]-2-pyrimidinyl]amino]-1H-indole-2-carboxylic acid, ethyl ester,  
5-bromo-N4-[2-(1H-imidazol-5-yl)ethyl]-N2-(2-methyl-6-quinoliny)-2,4-pyrimidinediamine,  
4-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)-benzamide,  
4-((4-((2-(1H-imidazol-4-yl)ethyl)amino)-5-iodo-2-pyrimidinyl)amino)-benzenesulfonamide,  
3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)-benzamide,  
3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)-benzenesulfonamide,  
5-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)-1,3-dihydro-2H-benzimidazol-2-one,  
3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)-benzoic acid methyl ester,

3-amino-5-((5-bromo-4-((2-(1*H*-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)- benzoic acid methyl ester,  
*N*-((3-((5-bromo-4-((2-(1*H*-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)phenyl)methyl)-methanesulfonamide,  
5 4-((5-bromo-4-((2-(1*H*-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)-benzoic acid methyl ester,  
3-((5-bromo-4-((2-(1*H*-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)-phenol,  
5-((5-bromo-4-((2-(1*H*-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)-1*H*-  
10 isoindole-1,3(2*H*)-dione,  
5-bromo-*N*<sup>4</sup>-(2-(1*H*-imidazol-4-yl)ethyl)-*N*<sup>2</sup>-(3-methylphenyl)-2,4-pyrimidinediamine,  
*N*-(3-((5-bromo-4-((2-(1*H*-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)phenyl)-methanesulfonamide,  
15 4-((4-((2-(1*H*-imidazol-4-yl)ethyl)amino)-5-methyl-2-pyrimidinyl)amino)-benzenesulfonamide,  
4-((4-((2-(1*H*-imidazol-4-yl)ethyl)amino)-5-(trifluoromethyl)-2-pyrimidinyl)amino)-benzenesulfonamide,  
4-((4-((3-aminopropyl)amino)-5-bromo-2-pyrimidinyl)amino)-benzenesulfonamide,  
20 4-((5-bromo-4-((3-(1*H*-imidazol-1-yl)propyl)amino)-2-pyrimidinyl)amino)-benzenesulfonamide,  
4-((5-bromo-4-((2-(1-pyrrolidinyl)ethyl)amino)-2-pyrimidinyl)amino)-benzenesulfonamide,  
25 4-((4-((4-aminobutyl)amino)-5-bromo-2-pyrimidinyl)amino)-benzenesulfonamide,  
4-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-pyrimidinyl)amino)-butanoic acid,  
4-((4-((3-((aminocarbonyl)amino)propyl)amino)-5-bromo-2-pyrimidinyl)amino)-benzenesulfonamide,  
30 4-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-pyrimidinyl)amino)-butanoic acid ethyl ester,  
4-((5-bromo-4-((4-(methylamino)butyl)amino)-2-pyrimidinyl)amino)-



benzenesulfonamide,

4-((5-bromo-4-((2-(1*H*-imidazol-1-yl)ethyl)amino)-2-pyrimidinyl)amino)-

benzenesulfonamide,

4-((5-ethyl-4-((2-(1*H*-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)-

benzenesulfonamide,

4-((4-((2-(1*H*-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)-

benzenesulfonamide,

4-((5-bromo-4-((2-(2-pyridinyl)ethyl)amino)-2-pyrimidinyl)amino)-

benzenesulfonamide,

4-((5-bromo-4-((2-(1*H*-indol-3-yl)ethyl)amino)-2-pyrimidinyl)amino)-

benzenesulfonamide,

2-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-pyrimidinyl)amino)-

acetamide,

*N*-(2-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-

pyrimidinyl)amino)ethyl)-acetamide,

3-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-pyrimidinyl)amino)-

propanamide,

*N*-(4-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-

pyrimidinyl)amino)butyl)-acetamide,

*N*-(3-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-

pyrimidinyl)amino)propyl)-acetamide,

*N*-(3-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-

pyrimidinyl)amino)propyl)-2-furancarboxamide,

*N*-(3-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-

pyrimidinyl)amino)propyl)-1*H*-pyrrole-2-carboxamide,

4-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-pyrimidinyl)amino)-

butanamide,

*N*-(3-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-

pyrimidinyl)amino)propyl)-2-thiophenecarboxamide,

4-((4-(4-(aminomethyl)-1-piperidinyl)-5-bromo-2-pyrimidinyl)amino)-

benzenesulfonamide,

4-(5-Brom-4-prop-2-ynylamino-pyrimidin-2-ylamino)-phenyl]-*N,N*-

dimethylaminosulfonylamin,

1-Methyl-1H-imidazol-4-sulfonsäure [4-(5-brom-4-prop-2-ynylamino-pyrimidin-2-ylamino)-phenyl]-amid,

3-(5-Bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-benzoic acid ethyl ester,

4-(5-Bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-benzoic acid ethyl ester,

2-(5-Bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-benzoic acid ethyl ester,

2-(5-Bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenol,

4-(5-Bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-benzoic acid methyl ester,

3-(5-Nitro-4-prop-2-ynylamino-pyrimidine-2-ylamino)-phenol,

2-(5-Nitro-4-prop-2-ynylamino-pyrimidine-2-ylamino)-benzoic acid ethyl ester,

3-(5-Nitro-4-prop-2-ynylamino-pyrimidine-2-ylamino)-benzoic acid ethyl ester,

4-(5-Nitro-4-prop-2-ynylamino-pyrimidine-2-ylamino)-benzoic acid ethyl ester,

4-(5-Nitro-4-prop-2-ynylamino-pyrimidine-2-ylamino)-phenol,

Methyl 3-[[5-bromo-4-(prop-2-ynyloxy)pyrimidin-2-yl]amino]-5-[(2-hydroxyethyl)amino]benzoate,

Methyl 3-amino-5-[[5-bromo-4-(prop-2-ynyloxy)pyrimidin-2-yl]amino]benzoate or

3-[Bis-(2-hydroxy-ethyl)-amino]-5-(5-bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-benzoic acid methyl ester.

12. Pharmaceutical composition comprising as an active ingredient at least one compound of general formula (I) according to any one of claims 1 to 10 or compounds according to claim 11 in an therapeutically effective amount for the prevention or treatment of a disorder caused by, associated with or accompanied by disruptions of cell proliferation and/or angiogenesis together with an pharmaceutically acceptable carrier, diluent or excipient.

13. Use of a compound of general formula (I) according to claim 1 or 10 or compounds according to claim 11 for the manufacture of a medicament for the prevention or treatment of a disorder caused by, associated with or accompanied by any abnormal kinase activity selected from Chk, Akt, Pdk, Cdk and/or VEGF-R activity as well as combinations thereof.

14. The use of a compound of general formula (I) according to any one of claims 1 to 5, wherein the kinase is selected from PDK1, Akt1, Akt2 and/or Akt3.

15. The use of a compound of general formula (I) according to claim 13, wherein the kinase is selected from PDK1, Akt1, Akt2 and/or Akt3 in combination with VEGF-R.

16. The use of a compound of general formula (I) according to any one of claims 1 and 6 to 8, wherein the kinase is selected from Chk1 and/or Chk2.

17. The use according to any one of claims 13 to 16, wherein the disorder is selected from cancer, angiofibroma, arthritis, eye diseases, auto-immune diseases, chemotherapy agent-induced alopecia and mucositis, Crohn-disease, endometriosis, fibrotic diseases, hemangioma, cardiovascular diseases, infectious diseases, nephrological diseases, chronic und acute neurodegenerative diseases, like disruptions of nerval tissue, viral infections, to prevent restenosis of vessels, for preventing the formation of scars, preventing or treating keratoma seniles and contact dermatitis.

18. The use according to claim 17, wherein cancer stands for solide tumours, tumour- or metastasis growth, Kaposi Sarkom, Hodgkin's disease and/or leukemia, arthritis stands for rheumatoid arthritis, eyes diseases stand for diabetic retinopathy, neovaskular glaukoma, auto-immune diseases stand for psoriasis, alopecia and/or multiple sklerosis, fibrotic diseases stand for cirrhosis of the liver, mesangial cell proliferative diseases, arteriosklerosis, infectiouse diseases stand for diseases that are caused by unicellular parasites, cardiovascular diseases stand for stenosis, like stent induced restenosis, arteriosklerosis and restenosis, nephrological diseases stand for glomerulonephritis, diabetic nephropaty, malignant nephrosklerosis, thrombic mikroangiopathis syndrome, transplant

rejections and glomerulopathy,

chronic neurodegenerative diseases stand for Huntington's disease,  
amyotrophic lateralsklerosis, Parkinsons disease, AIDS, dementia und  
Alzheimer's disease,

5 acute neurodegenerative diseases stand for ischemias of the brain and  
neurotraumas, and  
viral infections stand for cytomegalic infections, herpes, hepatitis B or C and  
HIV.

10 19. A method of treating a mammal having a disease-state alleviated by the  
inhibition of Akt, Pdk, chk and/or VEGF-R activity, wherein the method  
comprises administering to a mammal a therapeutically effective amount of a  
compound of general formula (I) according to any one of claims 1 to 10 or  
the compounds of claim 11.

15 20. The method of claim 19 wherein the mammal is a human.

21. The method of claim 19 or 20, wherein the disease-state is cancer,  
angiofibroma, arthritis, eye diseases, auto-immune diseases, chemotherapy  
20 agent-induced alopecia and mucositis, Crohn's disease, endometriosis,  
fibrotic diseases, hemangioma, cardiovascular diseases, infectious diseases,  
nephrological diseases, chronic und acute neurodegenerative diseases, like  
disruptions of nerval tissue, viral infections, prevention of restenosis of  
vessels, prevention the formation of scars, prevention or treatment of  
25 keratoma seniles or contact dermatitis.

22. The method of claim 21, wherein  
cancer stands for solide tumours, tumour- or metastasis growth, Kaposis  
Sarkom, Hodgkin's disease and/or leukemia,  
30 arthritis stands for rheumatoid arthritis,  
eyes diseases stand for diabetic retinopathy, neovaskular glaukoma,  
auto-immune diseases stand for psoriasis, alopecia and/or multiple sklerosis,  
fibrotic diseases stand for cirrhosis of the liver, mesangial cell proliferative

diseases, arteriosklerosis,

infectious diseases stand for diseases that are caused by unicellular

parasites,

cardiovascular diseases stand for stenosis, like stent induced restenosis,

arteriosklerosis and restenosis,

nephrological diseases stand for glomerulonephritis, diabetic nephropathy,

malignant nephrosklerosis, thrombotic mikroangiopathy syndrome, transplant

rejections and glomerulopathy,

chronic neurodegenerative diseases stand for Huntington's disease,

amyotrophic lateralsklerosis, Parkinsons disease, AIDS, dementia und

Alzheimer's disease,

acute neurodegenerative diseases stand for ischemias of the brain and

neurotraumas, and

viral infections stand for cytomegalic infections, herpes, hepatitis B or C and

HIV.